SITREP.06.04

SITUATION REPORT ON EMERGENCY TRANSBOUNDARY OUTBREAK PESTS (ETOPS) FOR JUNE WITH A FORECAST TILL MID-AUGUST 2004

SUMMARY

1. **Summary:** This report provides an update on the situation of emergency transboundary outbreak pests (ETOPs) in June with a forecast till mid-August 2004 in the various outbreak and invasion areas in Africa, the Middle-East, and Central and Southwest Asia. The report covers locusts, grasshoppers, armyworm and grain-eating *Quelea* birds. A brief overview on the status of each of these pests for the month is outlined in the remainder of this summary and detailed accounts with a six-week forecast are provided thereafter.

DESERT LOCUST, *Schistocerca gregaria* (FORSKAL)

2. The desert locust, *Schistocerca gregaria* (Forskal), situation remained pretty serious in June in the spring breeding areas where intensive control operations were carried out in Morocco, Algeria, Tunisia and Libya and treated more than 1.6 million ha in just one month! Small swarms were also treated on more than 1,500 ha in Mauritania, Senegal and Niger in June. Escapee swarms from the spring breeding areas have begun arriving in northern Mali, southern Mauritania and northern Senegal. Resident populations have also started appearing in Air and Tamesna, Niger. The central and the eastern region outbreak areas remained fairly calm and only a few isolated adults were seen in June.

3. Forecast: More escapee swarms from northwestern Africa are expected to arrive in the Sahel over the coming weeks. Those that have already arrived will continue to disperse over large areas, breed and give rise to hoppers and bands during the forecast period. Resident locust populations will also continue breeding during the forecast period. Some swarms from northwest Africa could also move east and breed in areas of recent rainfall and give rise to hoppers in western Sudan and southwestern Egypt during the forecast period. If ecological conditions continue to be favorable in the coming months, it is highly likely that the locust situation could further deteriorate and pose a serious threat to crops across the greater Sahel. The UN/FAO and donors have so far made cash and in kind contributions worth more than ten million USD to which USAID, mainly through OFDA contributed $2.56 million (the largest donation so far). Additional donor supports worth several million dollars have been indicated. The 1986-89 locust plague that affected more than 26 nations and cost the international community alone $300 million, including $58.3 million from USAID/OFDA, is a constant reminder how costly this pest can be!

OTHER LOCUSTS AND GRASSHOPPERS

4. **Red locust, *Nomadacris septemfasciata*** (Surville) **populations persisted in the Iku-Katavi, Rukwa and the Wembere outbreak areas in Tanzania in June.** The other outbreak areas remained fairly calm. Locust groups and concentrations are likely to be seen forming small swarms in the Rukwa, Wembere and the Iku-Katavi plains, Tanzania during the forecast period.

5. **Brown locust**, *Locusta pardalina* (Walker): A late received report indicated that hopper bands and swarms of brown locust were controlled in the Northern Cape Province, South Africa in May. No reports were received in June.

6. **Madagascar migratory locust, *Locusta migratoria capito* (L.).** No update was received on L. m. capito in June.

7. ***Populations of the* African migratory locust, *Locusta migratoria migratorioides***, were controlled in central Botswana and ***t*ree locust,** *Anacridium melanorhodon* was controlled on acacia trees in Turkana, Kenya in May. Copulating tree locust groups and small swarms were seen in western Darfur, Sudan in June.

8. Adult **Zonocerus variegatus** (ZVA) (L), the variegated grasshopper were reported in Senegal, in June. Hoppers of the Senegalese grasshopper ***Oedaleus senegalensis*** (Krauss) (OES), were reported on millet seedlings in central Senegal. More adult ZVA and hoppers of OES are likely to be seen in several places in Senegal and other Sahelian countries during the forecast period.

9. ***Dociostaurus maroccanus, Moroccan locus*:** No report was received in June on the Moroccan, the Italian, ***Calliptamus italicus*** (L), or the migratory locust, ***Locusta migratoria migratoria***.

10. **Armyworm, *Spodoptera exempta* (Walker).** A late received report indicated that armyworm outbreaks were treated on wheat and maize in Nakuru and Marakwet, Kenya in May. Armyworm infestations were controlled on some 5,000 ha of crop field s and 3,500 ha of pasture in Oromia, SNNPR and Somalia regions, Ethiopia in June. No armyworm activities were reported elsewhere.

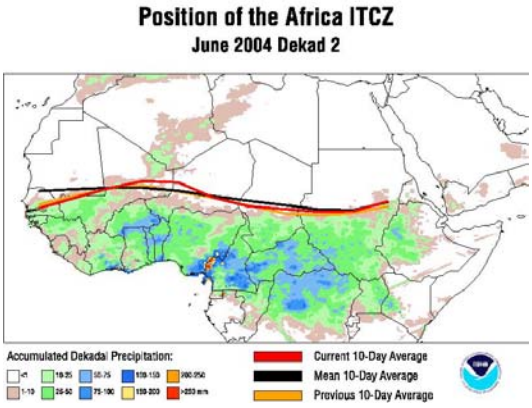
11. **Quelea quelea (L).** Quelea continued being a problem to wheat and other cereal farmers in Kenya, Tanzania and Botswana in June. Quelea birds were controlled in June in southern Ethiopia with the help of the DLCO-EA spray aircraft. It is likely that this pest will continue posing a threat to small grain cereals in these and the other outbreak areas during the forecast period.

12. **ETOPs in Latin America and the Caribbean (LAC)**. No report was received from LAC countries in June. No forecast was possible. **End of summary.**

ENVIRONMENTAL SITUATION: WEATHER AND ECOLOGICAL CONDITIONS

13. The ITCZ persisted over the heart of

the Sahel in June, slightly oscillating during the second dekad (see NOAA map below). A few areas in the summer breeding region in northwest Africa received light to moderate rain in June. Hence, most of these areas with the exception of a few places on the Atlas Mountain sides in Morocco and Algeria and a few laces in southern Tunisia remained fairly dry.



14. Light to moderate rains were reported in June in Western Darfur, Western Kordofan, Northern Kordofan, southern coastal plains of the Red Sea, White Nile and the Eastern Region near Kassala, Sudan. Light rains were also reported in western Eritrea, eastern Ethiopia, northwestern Somalia, on the Red Sea coasts of Yemen and southern Oman. Dry conditions persisted in other parts of the summer breeding areas in the central region outbreak areas.

15. Monsoon rains were reported in the summer breeding areas along the Indo-Pakistan border in the Eastern region outbreak areas. Light rains were reported in a few places in Rajasthan, India and Cholistan and Tharparkar, Pakistan

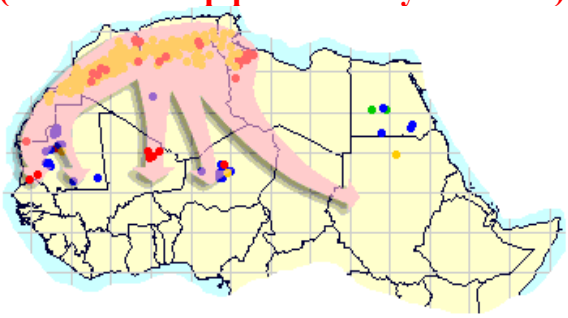
16. Isolated showers were recorded in the in the red locust outbreak areas in Buzi-Gorongosa plains, Mozambique and the Lake Chilwa/L Chiuta plains, Malawi. Temperatures were relatively low in all the outbreak areas. Apart from those light showers, dry conditions persisted in most of the red locust outbreak areas in June.

DESERT LOCUST ACTIVITIES

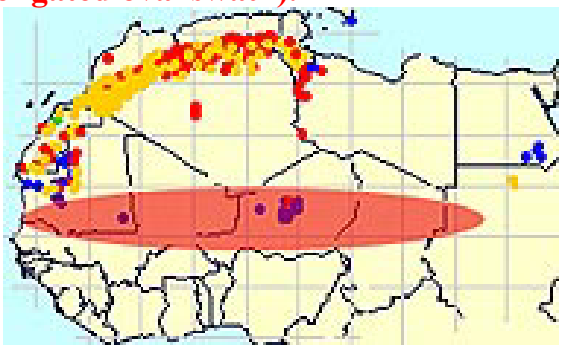
17. **Western and Northwestern Africa Outbreak Region: The desert locust, *S. gregaria* (Forskal), situation remained pretty serious in June in the spring breeding areas where intensive control operations were carried out in Morocco, Algeria, Tunisia and Libya and treated more than 1.6 million ha in June. More than 1,500 ha were also treated in Mauritania, Senegal and Niger. Escapee swarms from northwestern Africa have begun arriving in northern Mali, southern Mauritania and northern Senegal. Niger has been experiencing resident locust populations in Air and Tamesna over the past several days where more than 200 ha were treated in June. The FAO and traditional and non-traditions donors have so far made cash and in kind contributions worth more than 10 million USD to which USAID, mainly through OFDA, has contributed $2.56 million. There is an indication that additional supports worth several million will be forth coming from donors. The 1986-89 locust plague that affected more than 26 nations and cost the international community alone $300 million, including**

$58.3 million from USAID/OFDA, is a constant reminder how costly this pest can be!

18. Forecast: More escapee swarms and hopper bands from the spring breeding areas in Morocco, Algeria, Tunisia and Libya could further concentrate and continue moving south into the Sahel where they will disperse over large areas from Mauritania to Chad, breed and give rise to hoppers in the coming months. Resident locust populations will also continue breeding and forming hopper bands and more swarms in these areas in the months to come. A few swarms may also move east across North Africa and reach northwestern Sudan and Egypt were they could lay eggs and form hoppers during the forecast period (see above map produced by the FAO).



If ecological conditions continue to be favorable during the coming months, it is highly likely that the situation could further deteriorate and become a serious problem across much of the Sahel. If it happens, that could become a prelude to the development of a plague towards the end of the year where the situation could become far more serious, especially in the Sahel (see the FAO map below which shows the potential danger zone - the elongated oval swath).



19. **Eastern Africa, Northeastern Africa, and the Near East Outbreak Region:** The situation in the central outbreak regions remained fairly calm in June. Mixed populations of hoppers and adults of desert, tree and African migratory locusts were seen and treated on some 1,672 ha in southern Egypt. Isolated immature and mature adult desert locusts were seen on the north Red Sea coasts of Yemen and northwest Somalia in June. No significant locust populations were seen elsewhere in the region in June.

20. Forecast: Resident locusts could be seen breeding in areas of recent rainfall in North and West Darfur, North Kordofan, the White Nile State, Sudan during the forecast period. Some locust activities may also be seen in southern Egypt, the western lowlands in Eritrea, the interior and the Red Sea coasts of Yemen, and northwestern Somalia during the forecast period. Locusts from the spring breeding areas in northwestern Africa could possibly arrive in northwestern Sudan and Egypt during the forecast period where they could breed and give rise to hoppers.

The other countries in the region will likely remain fairly calm and no significant activities are expected during the forecast period.

21. Isolated immature adult locusts persisted in the Cholistan desert, Pakistan in the Eastern Region outbreak areas. No locusts were reported elsewhere in the region in June.

22. Forecast: Scattered adult locusts are likely to appear and breed in Rajasthan along the Indo-Pakistan border in the summer breeding areas during the forecast period, but significant activities are not expected.

OTHER LOCUST AND GRASSHOPPER ACTIVITIES

23. **Red locust, .N. *septemfasciata* (Surville):** A late received report indicated that red locust populations were seen and treated in the Iku-Katavi, Tanzania in May. Locust concentrations persisted in the Iku-Katavi, Rukwa and the Wembere outbreak areas in June. The seasonal grass burning that is in progress has forced some locusts to form groups and move to unburned areas. Control operations are scheduled for July/August when the locusts would have aggregated further into more discrete concentrations. The situation in the Malagarasi Basin, Tanzania; Lake Chilwa-Chiuta Plains in Malawi; the Buzi-Gorongosa plains in Mozambique; and the Kafue Flats and Mweru wa Ntipa plains in Zambia remained relatively calm.

24. **Forecast:** Concentrations of adult red locust are likely to form and may give rise to small swarms and dense populations in unburned grass fields in Iku-Katavi plains, Wembere plains, Malagarasi basin and Rukwa Valley in Tanzania. The other outbreak areas will likely remain fairly calm during the forecast period.

25. **Brown locust,** *L. pardalina*:, **(Walker):** A late received report indicated that hopper bands and swarms of brown locust were controlled in the Northern Cape Province, South Africa in May. No reports were received in June.

26. **Madagascar migratory locust, *L. m. capito.* (L.).** No report was received on the Madagascar migratory locust in June and no major activity is expected during the forecast period.

27. A late received report indicated that *s*warms of immature adult **African migratory locust, *L. m. migratorioides*** were seen attacking maize, millet, and pasture fields at Mopipi and Zoroga, Botswana and controlled on 2494ha in May. ***A t*ree locust,** *A. melanorhodon* population was seen in May defoliating acacia trees (the main source of forage for the livestock in semiarid regions), in Turkana, Kenya. Control was carried out by the Crop Protection Services in collaboration with the DLCO-EA which provided a spray aircraft. Fipronil (Adonis) and Chlorpyrifos (Dursban) were used to spray the infested area. Mixed populations of L. m. migratorioides and DL were seen and treated in May on some 1,433 ha at 2219N/2845E, in southern Egypt.

28. **Z. variegatus** (ZVA) (L), the variegated grasshopper populations were reported in June in Nioro, Ziguinchor, Kolda, Tambakunda and Sokone, Senegal.

Hatching of ***O. senegalensis*** (Krauss) (OES), the Senegalese grasshopper have been seen in the central region areas that received rain during the second dekad of the month. The pest was reported damaging millet seedlings. More adult ZVA and hoppers and adult OES are likely to appear in several places in Senegal and other Sahelian countries where they could pose a problem during the forecast period.

29. **Moroccan locust, *D. maroccanus*.** No report was received in June on the Moroccan and the Italian locusts, ***C. italicus*** (L).

30. Forecast: The locusts that were in recession in central Asia will likely begin appearing during the forecast period. AELGA will continue monitoring the situation in collaboration with its partners at the FAO's Migratory Pest Unit, GTZ and others and issue updates as necessary.

31. Afghanistan: he Afghanistan Plant Protection and Quarantine Department (PPQD) operates it receives from the UN/FAO, NGOs and donors. It is likely that external assistance will continue to play a significant role in PPQD's efforts to implement effective locust campaign in this country for quite sometime.

ARMYWORM ACTIVITIES

32. **Armyworm, *S. exempta* (Walker).** A late received report indicated that armyworm outbreaks were seen and treated in May in Nakuru and Marakwet districts, Kenya. The infestations were reported on wheat in Nakuru while maize in Marakwet. The pest was controlled using Carbosulfan E.C (Marshalls) and Pyrethrin E.C (Pyagro). Armyworm infestations were controlled 5,000 ha of crop fields and 4,500 ha of pasture land in Oromia, SNNPR and Somalia regions, Ethiopia in June. No reports were received from the other outbreak countries in the region.

33. Forecast: There is a likelihood of armyworm outbreaks occurring in Kenya and Ethiopia during the forecast period. Tanzania will be free of armyworm outbreaks until November when some activities may begin to be seen.

QUELEA BIRD ACTIVITIES

34. **Red-billed quelea, Q. *quelea* (L.).** A late received report indicated that Quelea birds were reported causing damage to wheat in Narok district, Kenya and several districts in Tanzania. Control operations were carried out by the Crop Protection Services and the Plant Health Services in collaboration with DLCO-EA in Kenya and Tanzania, respectively. Quelea birds were controlled in June in southern Ethiopia with the help of the DLCO-EA spray aircraft. Quelea activities were also reported in Botswana and South Africa in May where control operations were carried out against breeding colonies on several hectares. The birds were seen threatening millet, sorghum and wheat. The birds continued to pose a problem to wheat and other cereal growing districts in Kenya, Tanzania, and Botswana in June. It is likely that other outbreak countries eastern,

south-central and southern Africa might have experienced quelea invasions.

35. Forecast: Quelea and other grain eating birds will likely continue to breed and pose a problem to small grain cereal growers in Narok, Nakuru and Uasin Gishu districts, Kenya, in Tabora and Morogoro regions of Tanzania, Botswana, Mozambique, South Africa, Ethiopia, Sudan and other outbreak areas during the forecast period.

36. **ETOPs in Latin America and the Caribbean (LAC)**. No report was received on ETOPs from LAC countries in June. No forecast is being made due to a lack of sufficient information.

RECOMMENDATIONS

37. Favorable ecological conditions persisted in a few places in Morocco, Mauritania, Algeria, Mali and Niger in June. Locusts continued to appear in the spring breeding areas in Algeria, Morocco, Tunisia and Libya where control interventions continued well into June. **A serious threat lies ahead in Sahelian West and central Africa, including southern Mauritania, northern Senegal, Mali, Niger, and Chad. The beginning of the summer rains have somewhat coincided with the arrival of the swarms in the Sahel. It is likely that the locusts will begin breeding and spread over larger areas in and around the region. Some could even move east into western Sudan. Hence, frontline countries in the Sahel are alerted to carry out regular survey, monitoring, reporting and aggressive and coordinated control interventions.**

38. The Assistance for Emergency Locust/ Grasshopper Abatement project (AELGA), formerly known as Africa Emergency Locust/Grasshopper Assistance under the USAID's Bureau for Democracy, Conflict, and Humanitarian Assistance (DCHA), Office of U.S. Foreign Disaster Assistance (OFDA), continue monitoring ETOP situations in close collaboration with its partners, including the UN/FAO-MPU and EMPRES Regional Programs, DLCO-EA, IRLCO-CSA, host-country counterparts, etc. and provide assistance and updates.

ACTION BEING REQUESTED

39. USAID field Missions with portfolios on food security, agriculture, environment, and conflict are solicited to encourage host country counterparts to send us updates on ETOPs. FEWS field personnel are solicited to share with us information they may obtain on ETOP activities. Regional organizations with ETOP mandates and host country partners are kindly requested to send us their updates by the last day of the reporting month or within the first two days of the forecasting months. **Unsolicited updates on ETOPs activities are much appreciated**.

Please, forward reports, updates, questions, and/or requests to: Dr. Yene T. Belayneh: ybelayneh@ofda.net FAX: 202-347-0315;
Phone: 202-661-9374 (USA)

40. LINKS AND INFORMATION

For more information on the weather conditions, you may visit the following web sites:
http://www.fews.net/

http://www.fao.org/giews/english/giewse.htm

For more information on ETOP activities and related issues, you may visit:

http://www.fao.org/news/global/locusts/Locuhome.htm
http://www-web.gre.ac.uk/directory/NRI/quel/

http://icosamp.ecoport.org/

http://www.fao.org/EMPRES/default.htm

- **TO LEARN MORE ABOUT OUR ACTIVITIES, PLEASE, VISIT US AT OUR WEB SITE: WWW.AELGA.NET**

- **UPCOMING EVENT**

  - **Pesticide Stewardship Networking Workshop, Tanzania**

For more information please, contact:
Dr. Yene T. Belayneh

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